

(i)



Solutions

 $\sqrt[4]{x} = 5$

Input

Plot

 $\sqrt[\sqrt{x}]{x} = 5$

$$x = e^{-2W_1\left(\frac{1}{2}\left(-2i\pi n - \log(5)\right)\right)}, \quad i\left(2\pi n - i\log(5)\right) \neq 0,$$

$$\operatorname{Im}\left(W_1\left(\frac{1}{2}\left(-2i\pi n - \log(5)\right)\right)\right) < \frac{\pi}{2}, \quad n \in \mathbb{Z}$$
Approximate forms

 $x = e^{-2W_{-1}(\frac{1}{2}(-2i\pi n - \log(5)))}, \quad i(2\pi n - i\log(5)) \neq 0,$

 $\operatorname{Im}\left(W_{-1}\left(\frac{1}{2}\left(-2\,i\,\pi\,n-\log(5)\right)\right)\right) \geq -\frac{\pi}{2}\,,\quad n\in\mathbb{Z}$

POWERED BY THE WOLFRAM LANGUAGE

Related Queries:

plot $x^{1/sqrt(x)} - 5$

domain of $x^{(1/sqrt(x))}$ - 5

analyze http://www.catholichealthservices.org/media/image/New···

Mathematica function Reduce

plot3d $arg((x + i y)^{1/sqrt(x + i y)) - 5)$

Give us your feedback »

Have a question about using Wolfram|Alpha? **Contact Pro Premium Expert Support »**

Pro | Mobile Apps

Products | Business | API | LLM

About | Contact | 🚹 📉 🎯 in

©2025 Wolfram | Terms | Privacy